

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application.

1-30. (Cancelled)

31. (Previously presented) A method for biostoning comprising adding an enzyme preparation comprising a polypeptide having cellulase activity to cotton containing fabric or garments, wherein said polypeptide is selected from the group consisting of:

(i) a polypeptide comprising the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31,

(ii) a polypeptide having at least 95% identity to the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31,

(iii) a polypeptide comprising the amino acid sequence encoded by the DNA insert contained in the vector transformed into DSM 11024 or DSM 11012,

(iv) a polypeptide comprising amino acids 22-235 of the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31; and

(v) a polypeptide having at least 95% identity to amino acids 22-235 of the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31.

32. (Previously presented) A method according to claim 31, wherein said polypeptide comprises the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31.

33. (Previously presented) A method according to claim 31, wherein said polypeptide has at least 95% identity to the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31.

34. (Previously presented) A method according to claim 31, wherein said polypeptide comprises the amino acid sequence encoded by the DNA insert contained in the vector transformed into DSM 11024 or DSM 11012.

35. (Previously presented) A method according to claim 31, wherein said polypeptide comprises amino acids 22-235 of the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31.

36. (Previously presented) A method according to claim 31, wherein said polypeptide has at least 95% identity to amino acids 22-235 of the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31.

37. (Previously presented) A method according to claim 31, wherein said enzyme preparation is obtained by a process comprising:

(i) culturing a host cell transformed with the nucleic acid molecule comprising the sequence set forth in Figure 19 (SEQ ID NO: 30); and

(ii) separating said host cell from the culture medium and obtaining the supernatant having cellulase activity.

38. (Previously presented) A method according to claim 31, wherein said enzyme preparation is obtained by a process comprising:

(i) culturing a host cell transformed with the nucleic acid sequence encoding a cellulase having at least 95% identity to the amino acid sequence set forth in Figure 19 (SEQ ID NO: 31); and

(ii) separating said host cell from the culture medium and obtaining the supernatant having cellulase activity.

39. (Previously presented) A method according to claim 31, wherein said enzyme preparation is obtained by a process comprising:

(i) culturing a host cell transformed with the nucleic acid sequence encoding amino acids 22-235 of the amino acid sequence set forth in Figure 19 (SEQ ID NO: 31); and

(ii) separating said host cell from the culture medium and obtaining the supernatant having cellulase activity.

40. (Previously presented) A method according to claim 31, wherein said enzyme preparation is obtained by a process comprising:

(i) culturing a host cell transformed with the nucleic acid sequence encoding a cellulase having at least 95% identity to amino acids 22-235 of the amino acid sequence set forth in Figure 19 (SEQ ID NO: 31); and

(ii) separating said host cell from the culture medium and obtaining the supernatant having cellulase activity.

41. (Previously presented) A method according to claim 31, wherein said polypeptide is isolated and essentially homogenous.

42. (Previously presented) A method according to claim 31, wherein said enzyme preparation comprises at least one cellulase of a fungal species belonging to a fungal genus selected from the group consisting of *Melanocarpus* and *Myriococcum*.

43. (Previously presented) A method of claim 42, wherein the fungal species is *Melanocarpus albomyces*, *Myriococcum albomyces*, or *Myriococcum* sp. species represented by CBS 687.95.

44. (Previously presented) A method of claim 43, wherein the fungus is *Melanocarpus albomyces*, *Myriococcum albomyces* CBS 685.95, or *Myriococcum* sp. CBS 687.95.

45. (Previously presented) A method according to claim 31, wherein the enzyme preparation is liquid.

46. (Previously presented) A method according to claim 31, wherein the enzyme preparation is dry.

47. (Previously presented) A method according to claim 31, wherein the fabric or garments is denim.

48. (Previously presented) A method according to claim 31, wherein the enzyme preparation further comprises a surface active agent.

49. (Previously presented) A method for biofinishing comprising adding an enzyme preparation comprising a polypeptide having cellulase activity to textile materials like fabrics or garments or yarn, wherein said polypeptide is selected from the group consisting of:

(i) a polypeptide comprising the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31,

(ii) a polypeptide having at least 95% identity to the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31,

(iii) a polypeptide comprising the amino acid sequence encoded by the DNA insert contained in the vector transformed into DSM 11024 or DSM 11012,

(iv) a polypeptide comprising amino acids 22-235 of the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31; and

(v) a polypeptide having at least 95% identity to amino acids 22-235 of the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31.

50. (Previously presented) A method according to claim 49, wherein said polypeptide comprises the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31.

51. (Previously presented) A method according to claim 49, wherein said polypeptide has at least 95% identity to the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31.

52. (Previously presented) A method according to claim 49, wherein said polypeptide comprises the amino acid sequence encoded by the DNA insert contained in the vector transformed into DSM 11024 or DSM 11012.

53. (Previously presented) A method according to claim 49, wherein said polypeptide comprises amino acids 22-235 of the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31.

54. (Previously presented) A method according to claim 49, wherein said polypeptide has at least 95% identity to amino acids 22-235 of the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31.

55. (Previously presented) A method according to claim 49, wherein said enzyme preparation is obtained by a process comprising:

(i) culturing a host cell transformed with the nucleic acid molecule comprising the sequence set forth in Figure 19 (SEQ ID NO: 30); and

(ii) separating said host cell from the culture medium and obtaining the supernatant having cellulase activity.

56. (Previously presented) A method according to claim 49, wherein said enzyme preparation is obtained by a process comprising:

(i) culturing a host cell transformed with the nucleic acid sequence encoding a cellulase having at least 95% identity to the amino acid sequence set forth in Figure 19 (SEQ ID NO: 31); and

(ii) separating said host cell from the culture medium and obtaining the supernatant having cellulase activity.

57. (Previously presented) A method according to claim 49, wherein said enzyme preparation is obtained by a process comprising:

(i) culturing a host cell transformed with the nucleic acid sequence encoding amino acids 22-235 of the amino acid sequence set forth in Figure 19 (SEQ ID NO: 31); and

(ii) separating said host cell from the culture medium and obtaining the supernatant having cellulase activity.

58. (Previously presented) A method according to claim 49, wherein said enzyme preparation is obtained by a process comprising:

(i) culturing a host cell transformed with the nucleic acid sequence encoding a cellulase having at least 95% identity to amino acids 22-235 of the amino acid sequence set forth in Figure 19 (SEQ ID NO: 31); and

(ii) separating said host cell from the culture medium and obtaining the supernatant having cellulase activity.

59. (Previously presented) A method according to claim 49, wherein said polypeptide is isolated and essentially homogenous.

60. (Previously presented) A method according to claim 49, wherein said enzyme preparation comprises at least one cellulase of a fungal species belonging to a fungal genus selected from the group consisting of *Melanocarpus* and *Myriococcum*.

61. (Previously presented) A method of claim 60, wherein the fungal species is *Melanocarpus albomyces*, *Myriococcum albomyces*, or *Myriococcum* sp. species represented by CBS 687.95.

62. (Previously presented) A method of claim 61, wherein the fungus is *Melanocarpus albomyces*, *Myriococcum albomyces* CBS 685.95, or *Myriococcum* sp. CBS 687.95.

63. (Previously presented) A method according to claim 49, wherein the enzyme preparation is liquid.

64. (Previously presented) A method according to claim 49, wherein the enzyme preparation is dry.

65. (Previously presented) A method according to claim 49, wherein the textile materials are manufactured of natural cellulose containing fibers or manmade cellulose containing fibers or are mixtures thereof.

66. (Previously presented) A method according to claim 49, wherein the textile materials are blends of synthetic fibers and cellulose containing fibers.

67. (Previously presented) A method according to claim 49, wherein the enzyme preparation further comprises a surface active agent.

68. (Previously presented) A method for treating wood-derived pulp or fiber, comprising adding an enzyme preparation comprising a polypeptide having cellulase activity to wood-derived mechanical or chemical pulp or secondary fiber, wherein said polypeptide is selected from the group consisting of:

(i) a polypeptide comprising the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31,

(ii) a polypeptide having at least 95% identity to the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31,

(iii) a polypeptide comprising the amino acid sequence encoded by the DNA insert contained in the vector transformed into DSM 11024 or DSM 11012,

(iv) a polypeptide comprising amino acids 22-235 of the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31; and

(v) a polypeptide having at least 95% identity to amino acids 22-235 of the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31.

69. (Previously presented) A method according to claim 68, wherein said polypeptide comprises the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31.

70. (Previously presented) A method according to claim 68, wherein said polypeptide has at least 95% identity to the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31.

71. (Previously presented) A method according to claim 68, wherein said polypeptide comprises the amino acid sequence encoded by the DNA insert contained in the vector transformed into DSM 11024 or DSM 11012.

72. (Previously presented) A method according to claim 68, wherein said polypeptide comprises amino acids 22-235 of the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31.

73. (Previously presented) A method according to claim 68, wherein said polypeptide has at least 95% identity to amino acids 22-235 of the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31.

74. (Previously presented) A method according to claim 68, wherein said enzyme preparation is obtained by a process comprising:

(i) culturing a host cell transformed with the nucleic acid molecule comprising the sequence set forth in Figure 19 (SEQ ID NO: 30); and

(ii) separating said host cell from the culture medium and obtaining the supernatant having cellulase activity.

75. (Previously presented) A method according to claim 68, wherein said enzyme preparation is obtained by a process comprising:

(i) culturing a host cell transformed with the nucleic acid sequence encoding a cellulase having at least 95% identity to the amino acid sequence set forth in Figure 19 (SEQ ID NO: 31); and

(ii) separating said host cell from the culture medium and obtaining the supernatant having cellulase activity.

76. (Previously presented) A method according to claim 68, wherein said enzyme preparation is obtained by a process comprising:

(i) culturing a host cell transformed with the nucleic acid sequence encoding amino acids 22-235 of the amino acid sequence set forth in Figure 19 (SEQ ID NO: 31); and

(ii) separating said host cell from the culture medium and obtaining the supernatant having cellulase activity.

77. (Previously presented) A method according to claim 68, wherein said enzyme preparation is obtained by a process comprising:

(i) culturing a host cell transformed with the nucleic acid sequence encoding a cellulase having at least 95% identity to amino acids 22-235 of the amino acid sequence set forth in Figure 19 (SEQ ID NO: 31); and

(ii) separating said host cell from the culture medium and obtaining the supernatant having cellulase activity.

78. (Previously presented) A method according to claim 68, wherein said polypeptide is isolated and essentially homogenous.

79. (Previously presented) A method according to claim 68, wherein said enzyme preparation comprises at least one cellulase of a fungal species belonging to a fungal genus selected from the group consisting of *Melanocarpus* and *Myriococcum*.

80. (Previously presented) A method of claim 79, wherein the fungal species is *Melanocarpus albomyces*, *Myriococcum albomyces*, or *Myriococcum* sp. species represented by CBS 687.95.

81. (Previously presented) A method of claim 80, wherein the fungus is *Melanocarpus albomyces*, *Myriococcum albomyces* CBS 685.95, or *Myriococcum* sp. CBS 687.95.

82. (Previously presented) A method according to claim 68, wherein the enzyme preparation is liquid.

83. (Previously presented) A method according to claim 68, wherein the enzyme preparation is dry.

84. (Previously presented) A method according to claim 68, wherein the enzyme preparation further comprises a surface active agent.

85. (Previously presented) A method for improving the quality of animal feed, comprising treating plant material with an enzyme preparation comprising a polypeptide having cellulase activity, wherein said polypeptide is selected from the group consisting of:

(i) a polypeptide comprising the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31,

(ii) a polypeptide having at least 95% identity to the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31,

(iii) a polypeptide comprising the amino acid sequence encoded by the DNA insert contained in the vector transformed into DSM 11024 or DSM 11012,

(iv) a polypeptide comprising amino acids 22-235 of the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31; and

(v) a polypeptide having at least 95% identity to amino acids 22-235 of the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31.

86. (Previously presented) A method according to claim 85, wherein said polypeptide comprises the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31.

87. (Previously presented) A method according to claim 85, wherein said polypeptide has at least 95% identity to the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31.

88. (Previously presented) A method according to claim 85, wherein said polypeptide comprises the amino acid sequence encoded by the DNA insert contained in the vector transformed into DSM 11024 or DSM 11012.

89. (Previously presented) A method according to claim 85, wherein said polypeptide comprises amino acids 22-235 of the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31.

90. (Previously presented) A method according to claim 85, wherein said polypeptide has at least 95% identity to amino acids 22-235 of the amino acid sequence set forth in Fig. 19 and SEQ ID NO: 31.

91. (Previously presented) A method according to claim 85, wherein said enzyme preparation is obtained by a process comprising:

(i) culturing a host cell transformed with the nucleic acid molecule comprising the sequence set forth in Figure 19 (SEQ ID NO: 30); and

(ii) separating said host cell from the culture medium and obtaining the supernatant having cellulase activity.

92. (Previously presented) A method according to claim 85, wherein said enzyme preparation is obtained by a process comprising:

(i) culturing a host cell transformed with the nucleic acid sequence encoding a cellulase having at least 95% identity to the amino acid sequence set forth in Figure 19 (SEQ ID NO: 31); and

(ii) separating said host cell from the culture medium and obtaining the supernatant having cellulase activity.

93. (Previously presented) A method according to claim 85, wherein said enzyme preparation is obtained by a process comprising:

(i) culturing a host cell transformed with the nucleic acid sequence encoding amino acids 22-235 of the amino acid sequence set forth in Figure 19 (SEQ ID NO: 31); and

(ii) separating said host cell from the culture medium and obtaining the supernatant having cellulase activity.

94. (Previously presented) A method according to claim 85, wherein said enzyme preparation is obtained by a process comprising:

- (i) culturing a host cell transformed with the nucleic acid sequence encoding a cellulase having at least 95% identity to amino acids 22-235 of the amino acid sequence set forth in Figure 19 (SEQ ID NO: 31); and
- (ii) separating said host cell from the culture medium and obtaining the supernatant having cellulase activity.

95. (Previously presented) A method according to claim 85, wherein said polypeptide is isolated and essentially homogenous.

96. (Previously presented) A method according to claim 85, wherein said enzyme preparation comprises at least one cellulase of a fungal species belonging to a fungal genus selected from the group consisting of *Melanocarpus* and *Myriococcum*.

97. (Previously presented) A method of claim 96, wherein the fungal species is *Melanocarpus albomyces*, *Myriococcum albomyces* CBS 685.95, or *Myriococcum* sp. represented by CBS 687.95.

98. (Previously presented) A method of claim 97, wherein the fungus is *Melanocarpus albomyces*, *Myriococcum albomyces* CBS 685.95, or *Myriococcum* sp. CBS 687.95.

99. (Previously presented) A method according to claim 85, wherein the enzyme preparation is liquid.

100. (Previously presented) A method according to claim 85, wherein the enzyme preparation is dry.

101. (Previously presented) A method according to claim 85, wherein the enzyme preparation further comprises a surface active agent.

102-177. (Cancelled)

178. (Currently amended) A method according to claims 31, 49, 68, or 85, wherein said enzyme preparation further comprises at least one other cellulase cellulase of a fungal species belonging to a fungal genus selected from the group consisting of *Melanocarpus* and *Myriococcum*.

179. (Previously presented) A method according to claims 31, 49, 68, or 85, wherein said enzyme preparation is a partially or completely purified *Melanocarpus* cellulase fraction.

180. (Previously presented) A method according to claims 31, 49, 68, or 85, wherein said enzyme preparation is a culture supernatant comprising the cellulases derived from *Melanocarpus albomyces*.